United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,921	03/15/2004	Bradley A. Hare	20563/2284	9564
26161 7590 11/09/2007 FISH & RICHARDSON PC P.O. BOX 1022			EXAMINER	
			JAWORSKI, FRANCIS J	
MINNEAPOL	IS, MN 55440-1022		ART UNIT	PAPER NUMBER
			3768	
			MAIL DATE	DELIVERY MODE
			11/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Antique Occurrence	10/800,921	HARE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jaworski Francis J.	3768				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on <u>22 June 2004</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-40 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers		•				
9)☐ The specification is objected to by the Examine	r					
10)⊠ The drawing(s) filed on <u>15 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·	·				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment/c)						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/22/04. 	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te				

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Application/Control Number: 10/800,921

Art Unit: 3768

5 • •

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 - 40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims variously of U.S. Patent No. 6730048. Although the conflicting claims are not identical, they are not patentably distinct from each other because in this application, prior limitations are broadened to simply claim a transverse vibration associated effect involving the radio-opaque portion and the patent claims otherwise claim the features regarding the manner of opaque material attachment, and choice of contrast materials used.

Claim Rejections - 35 USC § 103

Application/Control Number: 10/800,921

Art Unit: 3768

j. **3**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 – 11, 15, 22 – 31, 34 - 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al (US5971949) which teaches a structure and method for providing an ultrasound vibratory member which includes a high radioopacity tip 50 connected to a proximal region of lower contrast visibility, see col. 11. Since elsewhere the patent disclosure states that the location of vibratory nodes is dependent on loading along its length, see col. 7 top portion, it is argued that under some loadings the tip portion would transmit tranverse vibrations where the radiopacitiy is of the tip itself (and therefore does not increase overall 'instrument diameter') or of a band adhered to its longitudinal surface.

Art Unit: 3768

The specification in cols. 9, 14 and 16 states that assembly may be by any conventional metallurgical or mechanical attachment.

Claims 12 – 14, 32 – 33 and 39 - 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al. as applied to claim 1 above, and further in view of Evans et al. (US5226909) since whereas the former is silent as to specific materials the latter mentions in its concluding portion certain materials which include tantalum as well as tungsten alloys and gold as being suitable for radiopaque markers for intravascular tools.

Claims 16 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al as applied to claims above, and further in view of Fawzi et al (US6036698) insofar as the former would teach that tip 50 could be made itself radiopaque and therefore not expanding of the diameter of the instrument and that the tip may be adapted to enhance local cavitation, however does not teach extending the radiopacity along the length, whereupon it would have been obvious in view of the latter col. 5 bottom to distribute the radiopaque materials such as tantalum and tungsten along the ultrasonic vibratory device length.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

10222006

Francis J. Jaworski Primary Examiner